

WHAT IS CLAIMED IS:

1 1. An imaging apparatus including at least an imaging device
2 having a plurality of photoelectric transfer devices arranged in matrix-
3 shape to detect a light irradiated to each photoelectric transfer device
4 and transfer to electric signal, and imaging means for imaging an image
5 of a photogenic object on a surface of the imaging devices,
6 wherein the imaging means images at least two similar images of the
7 photogenic subject on different area of the surface of the imaging device,
8 and the imaging apparatus further includes electric signal processing
9 means to form one image of the photogenic subject from at least two
10 images of the photogenic subject.

1 2. The imaging apparatus of Claim 1, wherein the imaging
2 means is composed of a plurality of lens systems having the same shape
3 or refractive index and arranged in a plane parallel to an light-receiving
4 surface of the imaging device.

1 3. The imaging apparatus of Claim 2, wherein the image
2 formation lenses composing each lens system are formed integrally.

1 4. The imaging apparatus of Claim 2, wherein the image
2 formation lenses composing the lens system are formed integrally of
3 material having a liner expansion coefficient of not more than $1 \times 10^{-5}/^{\circ}\text{C}$.

1 5. The imaging apparatus of Claim 2, wherein the image
2 formation lenses composing the lens system are bonded on a substrate

3 having a liner expansion coefficient of not more than $1 \times 10^{-5}/^{\circ}\text{C}$.